


# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

**Rec'd PCT/PTO 04 FEB 2005**

Applicant's or agent's file reference <b>P30191AGRE/RPA</b>	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)	
International application No. <b>PCT/GB 03/03431</b>	International filing date (day/month/year) <b>06.08.2003</b>	Priority date (day/month/year) <b>07.08.2002</b>
International Patent Classification (IPC) or both national classification and IPC <b>A61L2/10</b>		
Applicant <b>ALBAGAIA LIMITED et al.</b>		
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 5 sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of    sheets.</p>		
<p>3. This report contains indications relating to the following items:</p> <ul style="list-style-type: none"> <li>I <input checked="" type="checkbox"/> Basis of the opinion</li> <li>II <input type="checkbox"/> Priority</li> <li>III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</li> <li>IV <input type="checkbox"/> Lack of unity of invention</li> <li>V <input checked="" type="checkbox"/> Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</li> <li>VI <input type="checkbox"/> Certain documents cited</li> <li>VII <input type="checkbox"/> Certain defects in the international application</li> <li>VIII <input checked="" type="checkbox"/> Certain observations on the international application</li> </ul>		
Date of submission of the demand  <b>03.03.2004</b>	Date of completion of this report  <b>10.11.2004</b>	
Name and mailing address of the international preliminary examining authority:   European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer  <b>Katsoulas, K</b>  Telephone No. +49 89 2399-8613	



**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. **PCT/GB 03/03431**

**I. Basis of the report**

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

**Description, Pages**

1-26 as originally filed

**Claims, Numbers**

1-10 as originally filed

**Drawings, Sheets**

1/4-4/4 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
  - ☐ the language of publication of the international application (under Rule 48.3(b)).
  - ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).
3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:
- ☐ contained in the international application in written form.
  - ☐ filed together with the international application in computer readable form.
  - ☐ furnished subsequently to this Authority in written form.
  - ☐ furnished subsequently to this Authority in computer readable form.
  - ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
  - ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.
4. The amendments have resulted in the cancellation of:
- ☐ the description, pages:
  - ☐ the claims, Nos.:
  - ☐ the drawings, sheets:

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. **PCT/GB 03/03431**

---

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Yes: Claims	4,8
	No: Claims	1-3,5-7,9,10
Inventive step (IS)	Yes: Claims	4
	No: Claims	1-3,5-7-10
Industrial applicability (IA)	Yes: Claims	1-10
	No: Claims	

**2. Citations and explanations**

**see separate sheet**

**VIII. Certain observations on the international application**

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

**see separate sheet**

**INTERNATIONAL PRELIMINARY  
REPORT ON PATENTABILITY  
(SEPARATE SHEET)**

International application No.

PCT/GB 03/03431

D1: WO99/61075;

D2: Patent Abstracts of Japan vol. 1998, no. 01, 30.01.1998 & JP-A-09253637;

D3: Patent Abstracts of Japan vol. 18, no. 111 (C-1170) 23.02.1994 & JP-A-05305125

**Ad Section V:**

1. D1 discloses (cf. figures 2,6 and related description) an apparatus for the treatment of objects carrying bacteria comprising an operator accessible treatment vessel (100) comprising trays (610) to hold said contaminated objects and a light source (304,604) irradiating the objects for example at a wavelength of 290-380 nm (page 6, lines 24,25). A circuit (214,224,230) circulates and distributes a carrier medium through the apparatus. A microprocessor (400) controls and monitors the apparatus. It follows that apparatus claims 1-3 are not novel in view of D1 (Art. 33(2) PCT).
2. D3 also discloses an apparatus for sterilizing contaminated objects or media, comprising an operator accessible vessel for holding said objects or media and an appropriate UV light source. It follows that at least claim 1 lacks novelty in view of D3 (Art. 33(2) PCT).
3. D2 discloses a process and an apparatus for purifying and sterilizing water comprising the step of irradiating said water in the presence of a titania catalyst with ultraviolet light. Process claim 6 differs from D2 only in specifying a particular wavelength range. However, given that at least part of the claimed range falls within the normal UV radiation range, it is considered that said range is implicitly also anticipated by D2. It follows that process claims 6, 7 and 10 are known from D2 (Art. 33(2) PCT).
4. Claim 9 simply further specifies normal temperature and pressure conditions. Given that the circulating passage (18) in D2 returns purified water to vessel (17) which is open to the atmosphere, it is considered that the claimed T and P ranges implicitly also fall within the operating conditions of D2. Thus, also claim 9 lacks novelty (Art. 33(2) PCT).
5. The particular titania form defined in claim 8 is not disclosed in the available JP abstract of D2. However, given that the claimed types are in fact the most frequently used titania types, it is considered that, if not implicitly disclosed, at

**INTERNATIONAL PRELIMINARY  
REPORT ON PATENTABILITY  
(SEPARATE SHEET)**

International application No.

PCT/GB 03/03431

least no inventive step can be acknowledged for claim 8 (Art. 33(3) PCT).

6. The particular feature combination of apparatus claim 4 cannot be derived from the available art. Thus, subject to the clarity objections below, claim 4 would meet the requirements of Art. 33(3) PCT.

**Ad Section VIII:**

1. According to the description (pages 10 and 12), the desired hydroxyl radical production from the catalyst active sites requires the combined use of a photosensitive catalytic material and water. Given that said feature combination is not defined in the independent claims, the scope of these claims is not clear due to the lack of essential features (Art. 6 PCT).
2. Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the documents D1 - D3 is not mentioned in the description, nor are these documents identified therein.